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DICABS™

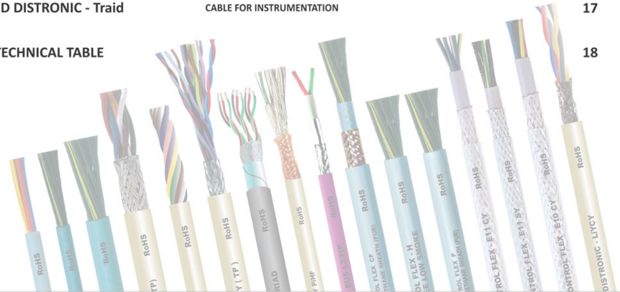
Automation, Data and Control Cables

DICABS™

When businesses connect to performance, ideas to innovation and people to brighter lives, a nation comes closer to realizing its true power. The Dicabs range of products is designed to empower an emerging India. Their state-of-the-art technology, high safety threshold and optimum power delivery ensures that millions have the power to transform dreams into reality.

CONTENTS

• FD CONTROL FLEX - E10	COLOUR CODE CONTROL CABLE	1
• FD CONTROL FLEX - E10 CY	TINNED COPPER WIRE BRAID COLOUR CODED TRANSPARENT PVC OUTER SHEATH	2
• FD CONTROL FLEX - E11	PVC OUTER SHEATH NUMBER CODED	3
• FD CONTROL FLEX - E11 CY	TINNED COPPER WIRE BRAID NUMBER CODED TRANSPARENT PVC OUTER SHEATH	5
• FD CONTROL FLEX - E11 SY	OXIDATION PROTECTED STEEL WIRE BRAID NUMBER CODED TRANSPARENT PVC OUTER SHEATH	6
• FD CONTROL FLEX - H	HALOGEN FREE PVC OUTER SHEATH NUMBER CODED	7
• FD CONTROL FLEX - P	PUR INSULATION POLYURETHANE SHEATH NUMBER CODED CABLE	8
• FD CONTROL FLEX - CP	PUR INSULATION SHIELDED POLYURETHANE SHEATH NUMBER CODED CABLE	9
• FD DISTRONIC - LiYY	PVC INSULATION PVC SHEATH DATA CABLE	10
• FD DISTRONIC - LiYCY	DATA CABLE WITH COPPER SCREEN	11
• FD DISTRONIC - LiYCY (TP)	TWISTED PAIR DATA CABLE WITH COPPER SCREEN	13
• FD DISTRONIC - Li2YCY (TP)	PVC OUTER SHEATH DATA CABLE WITH COPPER SCREEN	14
• FD DISTRONIC - Li2YCY PiMF	PAIR IN METAL FOIL AND COPPER SCREEN DATA CABLE	15
• FD DISTRONIC - BUS L2/FIP	CABLE FOR BUS SYSTEMS	16
• FD DISTRONIC - Traid	CABLE FOR INSTRUMENTATION	17
• TECHNICAL TABLE		18



PVC sheath and coloured cores

DICABS FD CONTROL FLEX - E10 RoHS

FD CONTROL FLEX - E10

Technical data

Core identification code
Based on: VDE 0293-308

Based on
IEC 60227-5
HD 21.5 S3; VDE 0281 Part 5
HD 21.13 S1; VDE 0281 Part 13

Specific insulation resistance
> 20 GOhm x cm

Conductor
fine wire base to
VDE 0295 K1.5/IEC 60228 C1.5

Minimum bending radius
occasional flexing: 15 x cable diameter
fixed installation: 4 x cable diameter

Rated voltage
up to 1.5 sqmm: Uo/U: 300/500 V
fixed, protected insulation: Uo/U: 600/1000V

Test voltage
4000V

Protective conductor
G=with protective conductor GN/YE
X=without protective conductor

Range of temperature
occasional flexing:-5 ° C to +70 ° C
fixed installation: -15 ° C to + 80 ° C

Application range

* Plant engineering and construction, Industrial machinery, Air-conditioning installations, Power stations
* Dry or damp interiors under medium mechanical load conditions
* Fixed installation as well as occasional flexing at free, non-continuously recurring movement without tensile load

Product make-up

* Bare copper wire bunched conductor
* PVC insulation
* Core Colour
* Cores twisted in layers
* PVC outer sheath, grey RAL(7001)

Approvals (Norm references)

* Using **RoHS** compliance compounds

Benefits

* Space-saving installation due to small cable diameters
* High electrical performance due to 4 kV test voltage. Increased flexibility due short-twisted Conductor layers

Product features

* Flame-retardant acc. to IEC 60332-1-2
* Good chemical resistance

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg./km	Weight kg./km (approx)
FD CONTROL FLEX - E10; Uo / U: 300 / 500 V				
FD 800042	2 X 0.5	5.4	9.6	43
FD 801043	3 G 0.5	5.7	14.4	51
FD 800043	3 X 0.5	5.7	15.0	51
FD 801044	4 G 0.5	6.4	19.2	65
FD 800044	4 X 0.5	6.4	19.2	65
FD 801045	5 G 0.5	6.9	24.0	79
FD 800045	5 X 0.5	6.9	24.0	79
FD 801046	6 G 0.5	7.5	29.0	93
FD 801047	7 G 0.5	7.5	33.6	94
FD 801048	8 G 0.5	8.4	38.4	115
FD 801410	10 G 0.5	9.4	48.0	145
FD 801412	12 G 0.5	9.7	58.0	160
FD 801414	14 G 0.5	10.4	67.0	184
FD 801416	16 G 0.5	10.9	76.0	206
FD 801421	21 G 0.5	12.5	99.0	270
FD 801424	24 G 0.5	13.8	114	323
FD 801440	40 G 0.5	16.3	192	475
FD 800052	2 X 0.75	6.2	14.4	58
FD 801053	3 G 0.75	6.6	21.6	69
FD 800053	3 X 0.75	6.6	21.6	69
FD 801054	4 G 0.75	7.2	28.8	85
FD 800054	4 X 0.75	7.2	28.8	85
FD 801055	5 G 0.75	8.0	36.0	109
FD 800055	5 X 0.75	8.0	36.0	109
FD 801056	6 G 0.75	8.7	43.3	131
FD 801057	7 G 0.75	8.7	50.4	130
FD 801058	8 G 0.75	9.9	56.0	165
FD 801059	9 G 0.75	10.8	63.0	191
FD 801510	10 G 0.75	11.2	72.0	209
FD 801512	12 G 0.75	11.6	86.4	230
FD 801515	15 G 0.75	12.8	108	285
FD 801518	18 G 0.75	13.5	129.6	324
FD 801521	21 G 0.75	14.7	151.0	380
FD 801525	25 G 0.75	16.2	180.0	461
FD 800062	2 X 1.0	6.5	19.2	67
FD 801063	3 G 1.0	6.9	29.0	81
FD 800063	3 X 1.0	6.9	28.0	81
FD 801064	4 G 1.0	7.8	38.4	103
FD 800064	4 X 1.0	7.8	38.4	103
FD 801065	5 G 1.0	8.5	48.0	128
FD 800065	5 X 1.0	8.5	48.0	128
FD 801066	6 G 1.0	9.2	58.0	154
FD 801067	7 G 1.0	9.2	67.0	154

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg./km	Weight kg./km (approx.)
FD CONTROL FLEX - E10; Uo / U: 300 / 500 V				
FD 801068	8 G 1.0	10.5	77.0	194
FD 801610	10 G 1.0	11.9	96.0	246
FD 801612	12 G 1.0	12.3	115.0	272
FD 801616	16 G 1.0	13.6	154.0	343
FD 801618	18 G 1.0	14.4	173.0	390
FD 801620	20 G 1.0	15.6	192.0	443
FD 801625	25 G 1.0	17.2	240.0	546
FD 800072	2 X 1.5	7.5	29	90
FD 801073	3 G 1.5	8.1	43.0	113
FD 800073	3 X 1.5	8.1	43.0	113
FD 801074	4 G 1.5	9.1	58.0	143
FD 800074	4 X 1.5	9.1	58.0	143
FD 801075	5 G 1.5	9.9	72.0	178
FD 800075	5 X 1.5	9.9	72.0	178
FD 801077	7 G 1.5	10.8	101.0	216
FD 801078	8 G 1.5	12.1	115.0	264
FD 801712	12 G 1.5	14.6	173.0	387
FD 801714	14 G 1.5	15.3	202.0	436
FD 801718	18 G 1.5	17.1	259.0	547
FD 801725	25 G 1.5	20.0	360.0	753
FD CONTROL FLEX - E10; Uo / U: 450 / 750 V				
FD 800082	2 X 2.5	8.9	47.8	134
FD 800083	3 X 2.5	9.7	71.9	168
FD 800084	4 X 2.5	11.0	95.8	220
FD 800085	5 X 2.5	12.0	119.6	273
FD 800087	7 X 2.5	13.3	166.8	338
FD 800088	8 X 2.5	15.5	189.8	436
FD 800092	2 X 4	10.2	76.5	187
FD 800093	3 X 4	11.2	114.8	253
FD 800094	4 X 4	12.3	154.0	296
FD 800095	5 X 4	13.9	192.0	384
FD 800097	7 X 4	15.5	268.0	486
FD 800102	2 X 6	11.4	108.0	242
FD 800103	3 X 6	12.8	172.8	321
FD 800104	4 X 6	14.0	230.0	401
FD 800105	5 X 6	15.7	287.0	518
FD 800107	7 X 6	17.7	402.0	665
FD 800112	2 X 10	14.5	185.6	399
FD 800113	3 X 10	15.9	286.5	517
FD 800114	4 X 10	17.7	384.0	658
FD 800115	5 X 10	20.0	480.0	857
FD 800123	3 X 16	19.2	458.9	785
FD 800124	4 X 16	21.4	614.0	1020

* Please specify the desired packaging size (e.g. 1 x 500 m drum or 5 x 100 m coils)
* Other sizes can be manufactured on demand

PVC sheath and coloured cores

FD CONTROL FLEX - E10 CY

Technical data

Core identification code
Based on: VDE 0293-308

Based on
IEC 60227-5
HD 21.5 S3; VDE 0281 Part 5
HD 21.13 S1; VDE 0281 Part 13

Specific insulation resistance
> 20 GOhm x cm

Conductor
fine wire base to
VDE 0295 K1.5/IEC 60228 C1.5

Protective conductor
G=with protective conductor GN/YE
X=without protective conductor

Range of temperature
occasional flexing: -5 ° C to +70 ° C
fixed installation: -15 ° C to + 80 ° C

Test voltage
4000V

Minimum bending radius
occasional flexing: 20 x cable diameter
fixed installation: 6 x cable diameter

Rated voltage
up to 1.5 sqmm: Uo/U: 300/500 V
starting at 1.5 sqmm: Uo/U: 450/750
fixed, protected insulation: Uo/U: 600/1000V

Application range

* Plant engineering and construction Industrial machinery
* Conveying and transport systems Servo drives
* In EMI critical environment (Electromagnetic interference)
* Data and Control Cables in Machinery, Computer System

Approvals (Norm references)

* Using **RoHS** complainces compounds

Benefits

* Space-saving installation due to small cable diameters
* High electrical performance due to 4 kV test voltage

Product make-up

* Bare copper wires bunched conductor
* PVC insulation
* PVC inner sheath, grey
* Screen made of tinned copper wire braid
* PVC outer sheath, transparent

Product features

* Flame-retardant acc. to IEC 60332-1-2
* Good chemical resistance
* High coverage degree of the screen low transfer impedance (max. 250 ohm/km at 30 Mhz)
* The screen density assures disturbance free transmission of all signals and impulses
* The applied clear transparent PVC outer sheath accentuates the Optical view of the tinned copper braid.

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg./km	Weight kg./km (approx)
FD CONTROL FLEX - E10 CY; Uo / U: 300 / 500 V				
FD 700042	2 X 0.5	7.4	41	87
FD 701043	3 G 0.5	7.7	46	97
FD 701044	4 G 0.5	8.1	55	110
FD 701045	5 G 0.5	8.8	66	131
FD 701047	7 G 0.5	9.3	80	149
FD 700052	2 X 0.75	8.0	46	104
FD 701053	3 G 0.75	8.3	57	117
FD 701054	4 G 0.75	8.8	64	135
Fd 701055	5 G 0.75	9.6	77	161
FD 701057	7 G 0.75	10.2	102	185
FD 700062	2 X 1.0	8.5	56	120
FD 701063	3 G 1.0	8.9	65	137
FD 701064	4 G 1.0	9.5	78	159
FD 701065	5 G 1.0	10.3	89	191
FD 701067	7 G 1.0	11.0	113	221
FD CONTROL FLEX - E10 CY; Uo / U: 450 / 750 V				
FD 700072	2 X 1.5	10.1	65	166
FD 701073	3 G 1.5	10.5	79	189
FD 701074	4 G 1.5	11.3	97	222
FD 701075	5 G 1.5	12.1	116	264
FD 701077	7 G 1.5	13.0	149	309
FD 700082	2 X 2.5	11.7	87	227
FD 701083	3 G 2.5	12.3	146	262
FD 701084	4 G 2.5	13.2	167	311
FD 701085	5 G 2.5	14.4	200	381
FD 701087	7 G 2.5	15.5	288	448
FD 700094	4 G 4.0	14.9	237	411
FD 701095	5 G 4.0	16.1	328	496
FD 701104	4 G 6.0	16.4	318	524
FD 701105	5 G 6.0	18.1	441	652
FD 701113	3 G 10	18.9	414	680
FD 701114	4 G 10	20.5	558	826
FD 701115	5 G 10	22.2	714	1012
FD 701123	3 G 16	21.6	607	939
FD 701124	4 G 16	23.4	804	1154

* Please specify the desired packaging size (e.g. 1 x 500 m drum or 5 x 100 m coils)
* Other sizes can be manufactured on demand

PVC sheath and numbered cores

FD CONTROL FLEX - E11

Technical data

Core identification code
Black with white number
Based on: VDE 0293

Conductor
fine wire base to
VDE 0295 K1.5/IEC 60228 C1.5

Rated voltage
Uo/U: 300/500 V

Protective conductor
G=with protective conductor GN/YE
X=without protective conductor

Specific insulation resistance
> 20 GOhm x cm

Minimum bending radius
occasional flexing: 15 x cable diameter
fixed installation: 4 x cable diameter

Test voltage
4000V

Range of temperature
occasional flexing:-5 ° C to +70 ° C
fixed installation: -15 ° C to + 80 ° C

Benefits

* Space-saving installation due to small cable diameters
* High electrical performance due to 4 kV test voltage

Approvals (Norm references)

* Using **RoHS** complainces compounds

Product features

* Flame-retardant acc. to IEC 60332-1-2
* Good chemical resistance

Product make-up

* Bare copper wire bunched conductor
* PVC insulation
* Cores twisted in layers
* PVC outer sheath, grey RAL(7001)

Application range

* Plant engineering and construction Industrial machinery, Air conditioning installations, Power stations
* Dry or damp interiors under medium Mechanical load conditions
* Fixed installation as well as occasional flexing at free, non-continuously recurring movement without tensile load

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg./km	Weight kg./km (approx.)
FD CONTROL FLEX - E11; Uo / U: 300 / 500 V				
FD 400042	2 X 0.5	5.2	9.6	41
FD 401043	3 G 0.5	5.5	14.4	47
FD 400043	3 X 0.5	5.5	15.0	47
FD 401044	4 G 0.5	5.9	19.2	57
FD 400044	4 X 0.5	5.9	19.2	57
FD 401045	5 G 0.5	6.6	24.0	73
FD 400045	5 X 0.5	6.6	24.0	73
FD 401046	6 G 0.5	7.1	29.0	85
FD 401047	7 G 0.5	7.1	33.6	87
FD 400047	7 X 0.5	7.1	33.6	87
FD 400048	8 X 0.5	7.9	36.0	105
FD 401410	10 G 0.5	8.8	48.0	131
FD 401412	12 G 0.5	9.1	58.0	144
FD 401414	14 G 0.5	9.5	67.0	162
FD 401416	16 G 0.5	11	86.4	226
FD 401421	21 G 0.5	11.5	101.0	238
FD 401424	24 G 0.5	12.9	120.0	278
FD 401430	30 G 0.5	14.9	144.0	382
FD 400052	2 X 0.75	5.8	14.4	52
FD 401053	3 G 0.75	6.1	21.6	62
FD 400053	3 X 0.75	6.1	21.6	62
FD 401054	4 G 0.75	6.7	28.8	75
FD 400054	4 X 0.75	6.7	28.8	75
FD 401055	5 G 0.75	7.4	36.0	97
FD 400055	5 X 0.75	7.4	36.0	97
FD 401056	6 G 0.75	8.0	39.4	115
FD 401057	7 G 0.75	8.0	50.0	116
FD 400057	7 X 0.75	8.0	50.0	116
FD 400058	8 G 0.75	8.9	52.5	140
FD 401059	9 G 0.75	9.6	65.0	161
FD 401510	10 G 0.75	10.0	72.0	176
FD 401512	12 G 0.75	10.3	86.0	196
FD 400512	12 X 0.75	10.3	86.0	196
FD 401515	15 G 0.75	11.4	108.0	241
FD 400515	15 X 0.75	11.4	108.0	241
FD 401516	16 G 0.75	11.6	115.2	250
FD 401518	18 G 0.75	12.0	130.2	275
FD 401521	21 G 0.75	13.3	151.0	330
FD 401525	25 G 0.75	14.6	180.0	398
FD 400062	2 X 1.0	6.3	19.2	64
FD 401063	3 G 1.0	6.7	28.8	77
FD 400063	3 X 1.0	6.7	28.8	77
FD 401064	4 G 1.0	7.3	38.4	94
FD 400064	4 X 1.0	7.3	38.4	94
FD 401065	5 G 1.0	7.9	48.0	116
FD 400065	5 X 1.0	7.9	48.0	116
FD 401066	6 G 1.0	8.6	58.0	140
FD 401067	7 G 1.0	8.6	67.0	140

PVC sheath and numbered cores

DICABS FD CONTROL FLEX - E11 **RoHS**

FD CONTROL FLEX - E11

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg./km	Weight kg./km (approx.)
FD CONTROL FLEX - E11; Uo / U: 300 / 500 V				
FD 400067	7 X 1.0	8.6	67.0	140
FD 401068	8 G 1.0	9.8	77.0	176
FD 401069	9 G 1.0	10.5	86.0	189
FD 401610	10 G 1.0	11.1	96.0	222
FD 401612	12 G 1.0	11.4	115.0	246
FD 400612	12 X 1.0	11.4	115.0	246
FD 401614	14 G 1.0	11.7	134.0	270
FD 401616	16 G 1.0	12.7	153.6	312
FD 401618	18 G 1.0	13.4	173.0	354
FD 400618	18 X 1.0	13.4	173.0	354
FD 401620	20 G 1.0	14.5	192.0	402
FD 400620	20 X 1.0	14.5	192.0	402
FD 401625	25 G 1.0	16.0	240.0	495
FD 400072	2 X 1.5	7.1	29.0	82
FD 401073	3 G 1.5	7.5	43.0	100
FD 400073	3 X 1.5	7.5	43.0	100
FD 401074	4 G 1.5	8.2	58.0	123
FD 400074	4 X 1.5	8.2	58.0	123
FD 401075	5 G 1.5	8.9	72.0	153
FD 400075	5 X 1.5	8.9	72.0	153
FD 401076	6 G 1.5	9.2	86.4	165
FD 401077	7 G 1.5	9.7	101.0	187
FD 400077	7 X 1.5	9.7	101.0	187
FD 400078	8 G 1.5	11.1	115.0	233
FD 400078	8 X 1.5	11.1	115.0	233
FD 401079	9 G 1.5	11.9	130.0	251
FD 401710	10 G 1.5	12.1	143.0	273
FD 401711	11 G 1.5	12.1	158.0	298
FD 401712	12 G 1.5	13.3	173.0	343
FD 400712	12 X 1.5	13.3	173.0	343
FD 401714	14 G 1.5	14.0	202.0	386
FD 401716	16 G 1.5	13.9	230.0	419
FD 401718	18 G 1.5	15.6	259.0	484
FD 401721	21 G 1.5	16.2	302.0	536
FD 401725	25 G 1.5	18.2	360.0	666
FD 401726	26 G 1.5	17.8	374.4	680
FD 400082	2 X 2.5	8.1	48.0	115
FD 401083	3 G 2.5	8.6	72.0	142
FD 401084	4 G 2.5	9.5	96.0	177
FD 401085	5 G 2.5	10.4	120.0	222
FD 401086	6 G 2.5	11.3	135.6	269
FD 401087	7 G 2.5	11.3	168.0	274
FD 400088	8 G 2.5	12.9	171.5	340
FD 401812	12 G 2.5	15.6	288.0	501
FD 401814	14 G 2.5	16.4	336.0	567
FD 401818	18 G 2.5	18.2	432.0	725
FD 401825	25 G 2.5	21.4	600.0	986
FD 400093	3 X 4	10.41	114.8	216
FD 400094	4 X 4	11.43	154.0	269
FD 400095	5 X 4	12.52	192.0	328
FD 400097	7 X 4	14.09	268.0	433
FD 400103	3 X 6	12.56	172.0	315
FD 400104	4 X 6	13.78	230.0	394
FD 400105	5 X 6	15.10	287.0	480
FD 400107	7 X 6	16.71	402.0	621
FD 400113	3 X 10	15.06	286.5	484
FD 400114	4 X 10	16.59	384.0	611
FD 400115	5 X 10	18.23	480.0	748
FD 400123	3 X 16	17.96	458.9	716
FD 400124	4 X 16	20.63	614.0	949

* Please specify the desired packaging size (e.g. 1 x 500 m drum or 5 x 100 m coils)

* Other sizes can be manufactured on demand

PVC sheath and numbered cores

FD CONTROL FLEX - E11 CY

Technical data

Core identification code
Black with white numbers based on: VDE 0293

Conductor stranding
fine wire bpse on VDE 0295 K1.5/IEC 60228 C1.5

Rated voltage
Uo/U: 300/500 V

Protective conductor
G=with protective conductor GN/YE
X=without protective conductor

Specific insulation resistance
> 20 GOhm x cm

Minimum bending radius
occasional flexing: 20 x cable diameter
fixed installation: 6 x cable diameter

Test voltage
4000V

Range of temperature
occasional flexing: -5 ° C to +70 ° C
fixed installation: -15 ° C to + 80 ° C

Benefits

* Space-saving installation due to small cable diameters
* High electrical performance due to 4 kV test voltage

Product make-up

* Bare copper wire bunched conductor
* PVC insulation
* PVC inner sheath, grey
* Screen made of tinned copper wire braid
* PVC outer sheath, transparent

Product features

* Flame-retardant acc. to IEC 60332-1-2
* Good chemical resistance
* High coverage degree of the screen low transfer impedance (max. 250 ohm/km at 30 Mhz)

* The screen density assures disturbance free transmission of all signals and impulses
* The applied clear transparent PVC outer sheath accentuates the optical view of the tinned copper braid.

Application range

* Plant engineering and construction, Industrial machinery, Air conditioning installations, Power stations

* Conveying and Transport systems
* Servo drives
* In EMI critical environment (Electromagnetic interference)

Approvals (Norm references)

* Using **RoHS** compliance compounds

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg./km	Weight kg./km (approx.)
FD CONTROL FLEX - E11 CY; Uo / U: 300 / 500 V				
FD 500042	2 X 0.5	7.4	41.0	87
FD 501043	3 G 0.5	7.7	45.5	97
FD 500043	3 X 0.5	7.7	45.5	97
FD 501044	4 G 0.5	8.1	55.0	110
FD 500044	4 X 0.5	8.1	55.0	110
FD 501045	5 G 0.5	8.8	66.0	131
FD 500045	5 X 0.5	8.8	66.0	131
FD 501046	6 G 0.5	9.3	72.0	149
FD 501047	7 G 0.5	9.3	80.5	149
FD 500047	7 X 0.5	9.3	80.5	149
FD 500048	8 X 0.5	10.3	85.6	177
FD 501410	10 G 0.5	11.4	96.0	217
FD 501412	12 G 0.5	11.6	138.5	232
FD 500412	12 X 0.5	11.6	138.5	232
FD 500414	14 X 0.5	12.3	144.0	260
FD 500416	16 X 0.5	12.8	149.3	283
FD 501418	18 G 0.5	13.7	156.4	325
FD 504425	25 G 0.5	15.6	250.0	419
FD 501430	30 G 0.5	16.7	297	483
FD 500052	2 X 0.75	8.0	46.0	104
FD 501053	3 G 0.75	8.3	57.9	117
FD 500053	3 X 0.75	8.3	57.9	117
FD 501054	4 G 0.75	8.8	64.0	135
FD 500054	4 X 0.75	8.8	64.0	135
FD 501055	5 G 0.75	9.6	77.4	161
FD 500055	5 X 0.75	9.6	77.4	161
FD 501056	6 G 0.75	10.2	81.0	184
FD 501057	7 G 0.75	10.2	102.0	185
FD 500057	7 X 0.75	10.2	102.0	185
FD 500058	8 X 0.75	11.1	109.0	216
FD 500510	10 X 0.75	12.4	134.0	268
FD 501512	12 G 0.75	12.9	177.0	295
FD 500512	12 X 0.75	12.9	177.0	295
FD 500514	14 X 0.75	13.6	192.0	331
FD 500516	16 X 0.75	14.2	206.0	362
FD 501518	18 G 0.75	15.0	243.0	408
FD 500518	18 X 0.75	15.0	243.0	408
FD 501525	25 G 0.75	17.4	307.3	541
FD 501530	30 G 0.75	18.7	318.0	628
FD 500062	2 X 1.0	8.5	56.0	120
FD 501063	3 G 1.0	8.9	65.3	137
FD 500063	3 X 1.0	8.9	65.3	137
FD 501064	4 G 1.0	9.5	78.1	159
FD 500064	4 X 1.0	9.5	78.1	159
FD 501065	5 G 1.0	10.3	89.4	191
FD 501066	6 G 1.0	11.0	96.0	221
FD 501067	7 G 1.0	11.0	113.3	221

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg./km	Weight kg./km (approx.)
FD CONTROL FLEX - E11 CY; Uo / U: 300 / 500 V				
FD 500068	8 X 1.0	12.4	126.0	273
FD 500610	10 X 1.0	13.7	151.0	331
FD 501612	12 G 1.0	14.0	188.1	358
FD 500614	14 X 1.0	14.8	197.7	401
FD 501616	16 G 1.0	15.7	216.0	450
FD 501618	18 G 1.0	16.4	286.0	500
FD 501625	25 G 1.0	19.2	388.5	674
FD 501630	30 G 1.0	20.7	426.0	783
FD 500072	2 X 1.5	9.3	65.0	145
FD 501073	3 G 1.5	9.7	83.0	166
FD 500073	3 X 1.5	9.7	83.0	166
FD 501074	4 G 1.5	10.4	100.0	194
FD 500074	4 X 1.5	10.4	100.0	194
FD 501075	5 G 1.5	11.3	125.0	236
FD 500075	5 X 1.5	11.3	125.0	236
FD 501076	6 G 1.5	12.1	136.0	275
FD 501077	7 G 1.5	12.1	149.0	277
FD 500077	7 X 1.5	12.1	149.0	277
FD 500078	8 x 1.5	13.7	178.0	341
FD 500710	10 X 1.5	15.1	225.0	417
FD 501712	12 G 1.5	15.7	280.0	462
FD 500714	14 X 1.5	16.4	305.0	511
FD 500716	16 X 1.5	17.4	336.0	575
FD 501718	18 G 1.5	18.6	389.0	656
FD 501725	25 G 1.5	21.8	535.0	888
FD 501730	30 G 1.5	23.0	596.0	1009
FD 500082	2 X 2.5	10.5	112.0	192
FD 501083	3 G 2.5	11.0	146.0	223
FD 501084	4 G 2.5	11.9	167.0	265
FD 501085	5 G 2.5	13.0	200.0	325
FD 501086	6 G 2.5	14.3	256.0	395
FD 501087	7 G 2.5	14.3	288.0	399
FD 501812	12 G 2.5	18.6	477.3	667
FD 500092	2 X 4.0	12.8	120.0	284
FD 501093	3 G 4.0	13.5	163.0	331
FD 501094	4 G 4.0	14.9	237.0	411
FD 501095	5 G 4.0	16.1	280.0	496
FD 500102	2 X 6.0	14.4	180.0	365
FD 501103	3 G 6.0	15.2	270.0	433
FD 501104	4 G 6.0	16.4	318.0	524
FD 501105	5 G 6.0	18.1	441.0	652
FD 500112	2 X 10	17.1	256.0	533
FD 501113	3 G 10	18.1	362.4	646
FD 501114	4 G 10	20.1	558.0	807
FD 501115	5 G 10	22.2	595.0	1012
FD 500122	2 G 16	20.0	390.0	753
FD 501124	4 G 16	23.4	804.0	1154

* Please specify the desired packaging size (e.g. 1 x 500 m drum or 5 x 100 m coils)
* other sizes can be manufactured on demand

PVC sheath and numbered cores

DICABS FD CONTROL FLEX - E11 SY RoHS

FD CONTROL FLEX - E11 SY

Technical data

Core identification code
Black with white numbers based on: VDE 0293

Conductor
fine wire base to VDE 0295 K1.5/IEC 60228 C1.5

Rated voltage
Uo/U: 300/500 V

Protective conductor
G=with protective conductor GN/YE
X=without protective conductor

Specific insulation resistance
> 20 GOhm x cm

Minimum bending radius
occasional flexing: 20 x cable diameter
fixed installation: 6 x cable diameter

Test voltage
4000V

Range of temperature
occasional flexing:-5 ° C to +70 ° C
fixed installation: -15 ° C to + 80 ° C

Benefits

* Space-saving installation due to small cable diameters
* High electrical performance due to 4kV test voltage

Approvals (Norm references)

* Using **RoHS** compliance compounds

Product make-up

* Bare copper wire bunched conductor
* PVC insulation
* PVC inner sheath, grey
* Oxidation protected steel wire braid
* PVC outer sheath, transparent

Product features

* Flame-retardant acc. to IEC 60332-1-2
* Good chemical resistance

Application range

* Plant engineering and construction, Industrial machinery, Air conditioning installations
* Fixed installation as well as occasional flexing at free, non-continuously recurring movement without tensile load
* Area with increased mechanical stress requirements
* The galvanized coating on the steel wire braiding not only helps protect against corrosion, but also notably improves the soldering performance.
* The clear transparent PVC outer sheath gives the cable in addition on optical revaluation.

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg./km	Weight kg./km (approx.)
FD CONTROL FLEX - E11 SY; Uo / U: 300 / 500 V				
FD 600042	2 X 0.5	8.0	10.0	99
FD 601043	3 G 0.5	8.3	15.0	107
FD 601044	4 G 0.5	8.7	19.2	107
FD 601045	5 G 0.5	9.4	24.0	119
FD 601046	6 G 0.5	9.9	29.5	157
FD 601047	7 G 0.5	9.9	33.6	119
FD 601048	8 G 0.5	10.9	41.3	190
FD 601410	10 G 0.5	12.0	48.0	232
FD 601412	12 G 0.5	12.2	58.0	247
FD 601414	14 G 0.5	12.9	67.0	275
FD 601416	16 G 0.5	13.4	76.5	297
FD 601418	18 G 0.5	14.3	86.4	337
FD 601425	25 G 0.5	16.2	120.0	432
FD 601430	30 G 0.5	17.3	144.0	503
FD 600052	2 X 0.75	8.6	14.4	114
FD 601053	3 G 0.75	8.9	21.8	126
FD 601054	4 G 0.75	9.4	28.8	143
FD 601055	5 G 0.75	10.2	36.0	169
FD 601056	6 G 0.75	10.8	43.0	194
FD 601057	7 G 0.75	10.8	50.4	205
FD 601058	8 G 0.75	11.7	58.0	234
FD 601510	10 G 0.75	13.0	72.0	282
FD 601512	12 G 0.75	13.5	86.4	309
FD 601514	14 G 0.75	14.2	100.4	343
FD 601516	16 G 0.75	14.8	115.0	374
FD 601518	18 G 0.75	15.6	129.6	422
FD 601525	25 G 0.75	18.0	180.0	564
FD 601530	30 G 0.75	19.3	220.0	648
FD 600062	2 X 1.0	9.1	19.2	130
FD 601063	3 G 1.0	9.5	29.0	145
FD 601064	4 G 1.0	10.1	38.4	166
FD 601065	5 G 1.0	10.9	48.0	204
FD 601066	6 G 1.0	11.6	57.9	236
FD 601067	7 G 1.0	11.6	67.0	237
FD 601068	8 G 1.0	13.0	77.0	285
FD 601610	10 G 1.0	14.3	96.0	343
FD 601612	12 G 1.0	14.6	115.0	372
FD 601614	14 G 1.0	15.4	134.0	415

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg./km	Weight kg./km (approx.)
FD CONTROL FLEX - E11 SY; Uo / U: 300 / 500 V				
FD 601616	16 G 1.0	16.3	154.6	474
FD 601618	18 G 1.0	17.0	173.0	522
FD 601625	25 G 1.0	19.8	240.0	693
FD 601630	30 G 1.0	21.3	291.0	799
FD 600072	2 X 1.5	9.9	29.0	155
FD 601073	3 G 1.5	10.3	43.0	175
FD 601074	4 G 1.5	11.0	58.0	211
FD 601075	5 G1.5	11.9	72.0	251
FD 601076	6 G 1.5	12.7	86.6	288
FD 601077	7 G 1.5	12.7	101.0	289
FD 601078	8 G 1.5	14.3	115.0	353
FD 601710	10 G 1.5	15.7	146.0	411
FD 601712	12 G 1.5	16.3	173.0	486
FD 601714	14 G 1.5	17.0	202.0	534
FD 601716	16 G 1.5	18.0	231.0	595
FD 601718	18 G 1.5	19.2	259.0	677
FD 601725	25 G 1.5	22.4	360.0	912
FD 601730	30 G 1.5	23.6	434.0	1030
FD 600082	2 X 2.5	11.1	48.0	204
FD 601083	3 G 2.5	11.6	72.0	234
FD 601084	4 G 2.5	12.5	96.0	277
FD 601085	5 G 2.5	13.6	120.0	337
FD 601086	6 G 2.5	14.9	144.0	409
FD 601087	7 G 2.5	14.9	168.0	413
FD 601812	12 G 2.5	19.2	288.0	685
FD 600092	2 X 4.0	13.4	76.8	124
FD 601093	3 G 4.0	14.0	115.2	343
FD 601094	4 G 4.0	15.5	154.0	425
FD 601095	5 G 4.0	16.7	192.0	516
FD 600102	2 X 6.0	15.0	115.0	379
FD 601103	3 G 6.0	15.8	172.5	447
FD 601104	4 G 6.0	17.0	230.0	542
FD 601105	5 G 6.0	18.7	288.0	669
FD 600112	2 X 10	17.7	192.0	555
FD 601113	3 G 10	18.7	288.0	665
FD 601114	4 G 10	20.7	384.0	826
FD 601115	5 G 10	22.8	480.0	1036
FD 600122	2 X 16	20.6	307.0	777
FD 601124	4 G 16	24.0	614.0	1173

* Please specify the desired packaging size (e.g. 1 x 500 m drum or 5 x 100 m coils)
* other sizes can be manufactured on demand

Halogen Free

FD CONTROL FLEX - H

Technical data

Core identification code
Black with white numbers based on: VDE 0293

Conductor
fine wire base to VDE 0295 Cl.5/IEC 60228 Cl.5

Range of temperature
occasional flexing -25 ° C to +70 ° C
fixed installation: -15 ° C to + 70 ° C

Rated voltage
Uo/U: 300/500 V

Based on
HD 21.13 S1; VDE 0281 Part 13

Minimum bending radius
occasional flexing: 15 x cable diameter
fixed installation: 4 x cable diameter

Protective conductor
G=with protective conductor GN/YE
X=without protective conductor

Test voltage
4000V

Specific insulation resistance
> 10 GOhm x cm

Application range

* Public facilities
* Airport, railway station
* Plant engineering and construction, Industrial machinery, Air conditioning installations
* Particularly where human and animal life as well as valuable property are exposed to high risk of fire hazards
* Especially in wet area of machine tools and transfer lines under normal mechanical stress

Product features

* Flame retardant based on IEC 60332-1-2 (flame spread on single cable)
* Halogen-free based on IEC 60754-1(amount of halogen acid gas) Corrosiveness of combustion gasses based on IEC 60754-2 (degree of acidity)
* Flexible down to -15 deg. C
* Highly flame-retardant

Product make-up

* Bare copper wire bunched conductor
* Halogen-free core insulation
* Halogen-free sheath - grey

Approvals (Norm references)

* Using **RoHS** compliance compounds

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg./km	Weight kg./km (approx.)
FD CONTROL FLEX - H; Uo / U: 300 / 500 V				
FD 1400072	2 X 1.5	7.1	29.0	82
FD 1401073	3 G 1.5	7.5	43.0	100
FD 1401074	4 G 1.5	8.2	58.0	123
FD 1401075	5 G 1.5	8.9	72.0	153
FD 1401077	7 G 1.5	9.7	101.0	187
FD 1401712	12 G 1.5	12.9	173.0	330
FD 1401718	18 G 1.5	15.2	259.0	468
FD 1401725	25 G 1.5	17.8	360.0	648
FD 1400082	2 X 2.5	8.1	48.0	115
FD 1401083	3 G 2.5	8.6	72.0	142
FD 1401084	4 G 2.5	9.5	96.5	177
FD 1401085	5 G 2.5	10.6	120.0	227
FD 1401087	7 G 2.5	11.7	168.0	285
FD 1401812	12 G 2.5	15.4	288.0	493
FD 1401094	4 G 4.0	11.4	154.0	268
FD 1401104	4 G 6.0	13.8	230.0	392

* Please specify the desired packaging size (e.g. 1 x 500 m drum or 5 x 100 m coils)

* other sizes can be manufactured on demand

Increased mechanical and chemical resistance

FD CONTROL FLEX P

PUR Insulated, Numbered, PUR Sheath

Technical data

Core identification code
Black with white numbers based on: VDE 0293

Conductor Stranding
fine wire base to VDE 0295 C1.5/IEC 60228 C1.5

Protective conductor
G=with protective conductor GN/YE
X=without protective conductor

Rated voltage
Uo/U: 300/500 V

Specific insulation resistance
> 20 GOhm x cm

Minimum bending radius
occasional flexing: 15 x cable diameter
fixed installation: 4 x cable diameter

Range of temperature
Flexing:-40 ° C to +90 ° C
fixed installation: -50 ° C to + 90 ° C

Test voltage
3000V

Benefits

* Protects against water and dirt
* Fire: low corrosive smoke emission
* Cold flexible
* Wear-resistant

Approvals (Norm references)

* Using **RoHS** compliance compounds

Product make-up

* Tinned copper wire bunched conductor
* Core insulation: PUR
* Special polyurethane sheath (PUR)
* Silver grey (RAL 7001)

Product features

* Oil resistant and adhesion-free
* Abrasion and cut resistant
* Halogen-free
* Flame-retardant (IEC 60332.1-2)

Application range

* Construction machinery
* Machine tools
* Especially in wet area of machine tools and transfer lines under normal mechanical Stress
* Production plants
* Indoors and outdoors

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg./km	Weight kg./km (approx.)
FD CONTROL FLEX - P; Uo / U: 300 / 500 V				
FD 1600042	2 X 0.5	6.2	9.6	46
FD 1601043	3 G 0.5	6.5	14.4	54
FD 1601044	4 G 0.5	7.1	19.2	65
FD 1601045	5 G 0.5	7.9	24.0	83
FD 1601047	7 G 0.5	8.5	33.6	98
FD 1601412	12 G 0.5	11.3	58.0	173
FD 1601418	18 G 0.5	13.1	86.4	239
FD 1601425	25 G 0.5	15.2	120.0	325
FD 1600052	2 X 0.75	6.6	14.4	54
FD 1601053	3 G 0.75	7.0	21.6	65
FD 1601054	4 G 0.75	7.6	28.8	79
FD 1601055	5 G 0.75	8.4	36.0	101
FD 1601057	7 G 0.75	9.1	50.4	121
FD 1601512	12 G 0.75	12.2	86.4	215
FD 1601518	18 G 0.75	14.1	129.6	299
FD 1601525	25 G 0.75	16.4	180.0	409
FD 1600062	2 X 1.0	7.3	19.2	69
FD 1601063	3 G 1.0	7.8	29.0	82
FD 1601064	4 G 1.0	8.5	38.4	101
FD 1601065	5 G 1.0	9.2	48.0	126
FD 1601067	7 G 1.0	10.4	67.0	160
FD 1601612	12 G 1.0	13.7	115.0	277
FD 1601618	18 G 1.0	16.0	173.0	397
FD 1601625	25 G 1.0	18.6	240.0	535
FD 1600072	2 X 1.5	7.9	29.0	83
FD 1601073	3 G 1.5	8.3	43.0	101
FD 1601074	4 G 1.5	9.1	58.0	125
FD 1601075	5 G 1.5	9.9	72.0	156
FD 1601077	7 G 1.5	10.8	101.0	191
FD 1601712	12 G 1.5	14.8	173.0	348
FD 1601718	18 G 1.5	17.5	259.0	499
FD 1601725	25 G 1.5	20.8	360.0	703
FD 1601083	3 G 2.5	9.7	72.0	147
FD 1601084	4 G 2.5	10.6	96.0	183
FD 1601085	5 G 2.5	12.0	120.0	239
FD 1601087	7 G 2.5	13.1	168.0	294
FD 1601812	12 G 2.5	18.0	288.0	537

* Please specify the desired packaging size (e.g. 1 x 500 m drum or 5 x 100 m coils)

* other sizes can be manufactured on demand

Increased mechanical and chemical resistance

FD CONTROL FLEX CP

PUR Insulated, Numbered, Shielded, PUR sheath

Technical data

Core identification code
Black with white numbers based on: VDE 0293

Specific insulation resistance
> 20 GOhm x cm

Minimum bending radius
occasional flexing: 15 x cable diameter

Protective conductor
G=with protective conductor GN/YE
X=without protective conductor

Based on
HD 21.13 S1; VDE 0281 Part 13

Rated voltage
Uo/U: 300/500 V

Test voltage
3000V

Conductor
fine wire base to VDE 0295 Cl.5

Range of temperature
occasional flexing:-25 ° C to +90 ° C
fixed installation: -30 ° C to + 90 ° C

Benefits

* Protects against water and dirt
* Fire: low corrosive smoke emission
* EMC compliant
* Wear-resistant

Product features

* Oil resistant and adhesion-free
* Abrasion and cut resistant
* Halogen-free
* Flame-retardant (IEC 60332.1-2)

Product make-up

* Tinned copper wire bunched conductor
* Core insulation: PUR
* Inner Sheath : PUR
* Screen made of tinned copper wire braid
* Special polyurethane sheath (PUR)
* Silver grey (RAL 7001)

Approvals (Norm references)

* Using **RoHS** compliance compounds

Application range

* Construction machinery
* Machine tools
* Especially in wet area of machine tools and transfer lines under normal mechanical stress
* Production plants
* Indoors and outdoors

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg./km	Weight kg./km (approx.)
FD CONTROL FLEX - CP; Uo / U: 300 / 500 V				
FD 1501043	3 G 0.5	8.9	44	112
FD 1501044	4 G 0.5	9.5	52	126
FD 1501045	5 G 0.5	10.1	61	146
FD 1501047	7 G 0.5	11.1	75	174
FD 1501412	12 G 0.5	13.7	131	267
FD 1501418	18 G 0.5	15.9	168	363
FD 1501425	25 G 0.5	18.0	212	463
FD 1500052	2 X 0.75	9.0	45	112
FD 1501053	3 G 0.75	9.4	52	126
FD 1501054	4 G 0.75	10.0	67	145
FD 1501055	5 G 0.75	11.0	75	179
FD 1501057	7 G 0.75	11.9	96	207
FD 1501512	12 G 0.75	14.5	160	313
FD 1501525	25 G 0.75	20.0	283	587
FD 1500062	2 X 1.0	9.3	49	122
FD 1501063	3 G 1.0	9.7	60	140
FD 1501064	4 G 1.0	10.4	78	161
FD 1501065	5 G 1.0	11.5	88	198
FD 1501067	7 G 1.0	12.4	115	235
FD 1501612	12 G 1.0	15.7	201	371
FD 1501618	18 G 1.0	18.2	267	512
FD 1501625	25 G 1.0	21.0	351	678
FD 1500072	2 X 1.5	10.3	68	151
FD 1501073	3 G 1.5	10.7	83	172
FD 1501074	4 G 1.5	11.5	102	202
FD 1501075	5 G 1.5	12.3	119	240
FD 1501077	7 G 1.5	13.4	186	287
FD 1501712	12 G 1.5	18.0	264	498
FD 1501718	18 G 1.5	20.9	379	687
FD 1501725	25 G 1.5	23.8	534	899
FD 1501083	3 G 2.5	12.1	121	229
FD 1501084	4 G 2.5	13.0	145	273
FD 1501085	5 G 2.5	14.6	205	347
FD 1501087	7 G 2.5	16.1	259	421
FD 1501812	12 G 2.5	21.0	407	704

* Please specify the desired packaging size (e.g. 1 x 500 m drum or 5 x 100 m coils)
* other sizes can be manufactured on demand

Data cables low frequency

FD DICABS DISTRONIC - LiYY **RoHS**

FD DISTRONIC - LiYY

Technical data

Core identification code
DIN 47100

Conductor
Strand, fine wire
0,34 sqmm; 7 wire

Specific insulation resistance
> 20 GOhm x cm

Peak working voltage
250 V (not for power applications)

Test voltage
at 0.14 sqmm: 1200 V
> 0.14 sqmm: 1500 V

Mutual capacitance
Approx. 120 nF / km

Based on
DIN VDE 0812

Inductivity
Approx. 0.65 mH / km

Range of temperature
Fixed installation:-15 ° C to +80 ° C
Flexing : -5 ° C to + 70 ° C

Minimum bending radius
Flexing: 15 x cable diameter

Benefits

* Considering economic minimum quantities the outer sheath can also be produced in special colours on request which match the special colour design of a device for example.
* Highly resistant against acids, lyes and certain Oils at room temperature.

Approvals (Norm references)

* Using **RoHS** compliance compounds

Product make-up

* Bare copper wire bunched conductor
* PVC core insulation and outer sheath
* Cores twisted
* Colour: grey

Application range

* LiYY is also used as a control and signal cable in electronics of computer system, electronic control equipment, office machines, balances, etc.
* Dry and damp indoors

Product features

* Despite the large number of cores, LiYY data Cables have small outer diameters.
* Core colour code in accordance with DIN 47100 excepting for extruded secondary colour line in place of ring printing but no colour repetition
* Flame-retardant acc. to IEC 60332-1-2

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg./km	Weight kg./km (approx.)
FD DISTRONIC LiYY Uo / U: 300 / 500 V				
FD 1300012	2 X 0.14	3.4	2.7	13
FD 1300013	3 X 0.14	3.6	4.0	16
FD 1300014	4 X 0.14	3.8	5.4	19
FD 1300015	5 X 0.14	4.1	6.7	23
FD 1300017	7 X 0.14	4.7	9.4	31
FD 1300018	8 X 0.14	5.2	10.2	35
FD 1300110	10 X 0.14	5.8	13.5	42
FD 1300112	12 X 0.14	6.1	16.2	51
FD 1300114	14X 0.14	6.4	18.9	57
FD 1300116	16X 0.14	6.7	21.6	63
FD 1300120	20 X 0.14	7.4	27.1	76
FD 1300121	21 X 0.14	7.6	28.4	82
FD 1300125	25 X 0.14	8.4	33.6	96
FD 1300130	30X 0.14	8.8	40.5	111
FD 1300022	2 X 0.25	4.1	4.8	20
FD 1300023	3 X 0.25	4.3	7.2	24
FD 1300024	4 X 0.25	4.6	9.6	29
FD 1300025	5 X 0.25	5.2	12.0	38
FD 1300027	7 X 0.25	5.6	16.8	46
FD 1300028	8 X 0.25	6.3	19.2	55
FD 1300210	10 X 0.25	7.0	24.0	66
FD 1300212	12 X 0.25	7.2	28.8	75
FD 1300214	14 X 0.25	7.5	33.6	84
FD 1300216	16 X 0.25	7.9	38.4	93
FD 1300218	18 X 0.25	8.3	43.2	104
FD 1300220	20 X 0.25	9.1	48.0	121
FD 1300225	25 X 0.25	9.9	60.0	144
FD 1300230	30 X 0.25	10.5	72.0	166
FD 1300032	2 X 0.34	4.5	6.6	25
FD 1300033	3 X 0.34	4.8	9.9	31
FD 1300034	4 X 0.34	5.2	13.1	38
FD 1300035	5 X 0.34	5.8	16.5	49
FD 1300037	7 X 0.34	6.4	22.8	63
FD 1300038	8 X 0.34	7.5	26.1	79
FD 1300310	10 X 0.34	7.9	32.6	86
FD 1300312	12 X 0.34	8.1	39.1	97
FD 1300314	14 X 0.34	8.5	45.7	110

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg./km	Weight kg./km (approx.)
FD DISTRONIC LiYY Uo / U: 300 / 500 V				
FD 1300316	16 X 0.34	8.9	52.0	122
FD 1300320	20 X 0.34	9.8	65.2	148
FD 1300321	21 X 0.34	10.2	68.6	163
FD 1300325	25 X 0.34	11.2	81.6	190
FD 1300330	30 X 0.34	11.9	98.0	220
FD 1300042	2 X 0.50	5.1	9.6	31
FD 1300043	3 X 0.50	5.3	14.4	39
FD 1300044	4 X 0.50	5.7	19.2	47
FD 1300045	5 X 0.50	6.2	24.0	58
FD 1300047	7 X 0.50	7.1	33.6	79
FD 1300048	8 X 0.50	8.1	38.4	94
FD 1300410	10 X 0.50	9.1	48.0	113
FD 1300412	12 X 0.50	9.2	58.0	128
FD 1300416	16 X 0.50	10.4	77.0	166
FD 1300420	20 X 0.50	11.6	96.0	207
FD 1300425	25 X 0.50	12.8	120.0	249
FD 1300430	30 X 0.50	13.7	144.0	296
FD 1300052	2 X 0.75	5.6	14.4	39
FD 1300053	3 X 0.75	5.9	21.6	50
FD 1300054	4 X 0.75	6.4	28.8	63
FD 1300055	5 X 0.75	7.2	36.0	81
FD 1300057	7 X 0.75	7.8	50.0	101
FD 1300058	8 X 0.75	8.9	58.0	120
FD 1300510	10 X 0.75	10.0	72.0	145
FD 1300512	12 X 0.75	10.7	86.0	177
FD 1300516	16 X 0.75	11.8	115.0	224
FD 1300520	20 X 0.75	13.1	144.0	273
FD 1300525	25 X 0.75	14.4	180	331
FD 1300062	2 X 1.0	6.2	19.2	48
FD 1300063	3 X 1.0	6.6	29.0	63
FD 1300064	4 X 1.0	7.2	39.5	78
FD 1300065	5 X 1.0	8.0	48.0	101
FD 1300072	2 X 1.5	7.2	29.0	65
FD 1300073	3 X 1.5	7.6	43.0	85
FD 1300074	4 X 1.5	8.3	58.2	107
FD 1300075	5 X 1.5	9.2	68.5	138

* Please specify the desired packaging size (e.g. 100 m coils)
* other sizes can be manufactured on demand

Data cables low frequency

DICABS FD DISTRONIC - LiYCY **RoHS**

FD DISTRONIC - LiYCY

Technical data

Core identification code
DIN 47100, without colour repetition

Range of temperature
fixed installation: -15 ° C to + 80 ° C

Minimum bending radius
Fixing: 15 x cable diameter
fixed, insulation: 6 x cable diameter

Conductor
Strand, fine wire
0.34 sqmm, 7 wire

Inductivity
Approx. 0.65 mH / km

Mutual capacitance
C / C approx. 140 nF / km
C / S approx. 190 nF / km

Peak working voltage
250 V (not for power applications)

Specific insulation resistance
> 20 GOhm x cm

Based on
VDE 0812

Test voltage
at 0.14 sqmm: 1200 V
> 0.14 sqmm: 1500 V

Application range

* Used for computer system, MSR technology, Office machinery, scales screened cables with small dimensions.
* Dry and damp indoors

Product make-up

* Bare copper wire bunched conductor
* PVC core insulation and outer sheath
* Screen made of tinned copper wire braid
* Colour: grey

Product features

* Core colour code in accordance with DIN 47100 except for extruded secondary colour line in place of ring printing.
* Flame-retardant acc. to IEC 60332-1-2

Approvals (Norm references)

* Using **RoHS** compliance compounds

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg./km	Weight kg./km (approx.)
FD DISTRONIC LiYCY ; Uo / U: 300 / 500 V				
FD 1100012	2 X 0.14	4.1	12.0	26
FD 1100013	3 X 0.14	4.2	13	29
FD 1100014	4 X 0.14	4.5	14.3	34
FD 1100015	5 X 0.14	4.8	15.5	40
FD 1100016	6 X 0.14	5.3	18.2	48
FD 1100017	7 X 0.14	5.3	19.0	49
FD 1100018	8 X 0.14	6.0	21.2	58
FD 1100110	10 X 0.14	6.6	28.5	68
FD 1100112	12X 0.14	6.8	30.4	75
FD 1100114	14X 0.14	7.1	32.0	82
FD 1100115	15 X 0.14	7.4	37.8	88
FD 1100116	16 X 0.14	7.4	43.0	91
FD 1100118	18 X 0.14	7.7	48.8	99
FD 1100120	20X 0.14	8.1	53.9	106
FD 1100121	21X 0.14	8.3	55.5	114
FD 1100125	25X 0.14	9.0	63.0	130
FD 1100128	28X 0.14	9.5	66.1	142
FD 1100130	30X 0.14	9.5	69.0	148
FD 1100022	2 X 0.25	4.8	16.0	35
FD 1100023	3 X 0.25	5.0	21.0	40
FD 1100024	4 X 0.25	5.3	24.0	47
FD 1100025	5 X 0.25	5.9	29.0	58
FD 1100026	6 X 0.25	6.3	30.0	66
FD 1100027	7 X 0.25	6.3	37.0	68
FD 1100028	8 X 0.25	7.0	42.0	79
FD 1100210	10 X 0.25	7.7	46.0	93
FD 1100212	12 X 0.25	7.9	53.0	102
FD 1100214	14 X 0.25	8.2	59.0	113
FD 1100215	15 X 0.25	8.6	61.0	121
FD 1100216	16 X 0.25	8.6	64.0	125
FD 1100218	18 X 0.25	9.0	83.0	136
FD 1100220	20 X 0.25	9.4	88.0	147
FD 1100221	21 X 0.25	9.8	93.0	160
FD 1100225	25 X 0.25	10.6	114.0	184
FD 1100228	28 X 0.25	11.1	126.0	202
FD 1100230	30 X 0.25	11.2	132.0	208
FD 1100032	2 X 0.34	5.2	21.0	42
FD 1100033	3 X 0.34	5.5	27.0	48
FD 1100034	4 X 0.34	5.9	28.0	58
FD 1100035	5 X 0.34	6.5	30.0	70
FD 1100036	6 X 0.34	7.1	45.0	84
FD 1100037	7 X 0.34	7.1	48.0	87
FD 1100038	8 X 0.34	8.2	52.0	106
FD 1100310	10 X 0.34	8.6	74.0	116
FD 1100312	12 X 0.34	8.8	80.0	128
FD 1100314	14 X 0.34	9.2	86.0	143
FD 1100315	15 X 0.34	9.6	90.0	152
FD 1100316	16 X 0.34	9.6	94.0	157

Data cables low frequency

FD DICABS DISTRONIC - LiYCY **RoHS**

FD DISTRONIC - LiYCY

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg./km	Weight kg./km (approx.)
FD DISTRONIC LiYCY ; Uo / U: 300 / 500 V				
FD 1100318	18 X 0.34	10.0	103.0	175
FD 1100320	20 X 0.34	10.5	112.0	186
FD 1100321	21 X 0.34	10.9	116.0	202
FD 1100325	25 X 0.34	11.9	135.0	233
FD 1100328	28 X 0.34	12.5	153.0	256
FD 1100330	30 X 0.34	12.6	159.0	267
FD 1100042	2 X 0.50	5.9	29.0	52
FD 1100043	3 X 0.50	6.2	38.0	61
FD 1100044	4 X 0.50	6.6	43.0	72
FD 1100045	5 X 0.50	7.3	51.0	89
FD 1100046	6 X 0.50	7.8	59.0	102
FD 1100047	7 X 0.50	7.8	65.0	106
FD 1100048	8 X 0.50	8.8	70.0	125
FD 1100410	10 X 0.50	9.7	88.0	147
FD 1100412	12 X 0.50	9.9	99.0	165
FD 1100414	14 X 0.50	10.6	110.0	188
FD 1100415	15 X 0.50	11.1	115.0	199
FD 1100416	16 X 0.50	11.1	121.0	206
FD 1100418	18 X 0.50	12.0	134.0	241
FD 1100420	20 X 0.50	12.5	149.0	258
FD 1100421	21 X 0.50	12.5	157.0	265
FD 1100425	25 X 0.50	13.7	211.0	307
FD 1100428	28 X 0.50	14.8	230.0	349
FD 1100430	30 X 0.50	14.8	243.0	364
FD 1100052	2 X 0.75	6.5	38.0	63
FD 1100053	3 X 0.75	6.8	49.0	77
FD 1100054	4 X 0.75	7.3	58.0	91
FD 1100055	5 X 0.75	8.1	67.0	113
FD 1100056	6 X 0.75	8.7	76.0	130
FD 1100057	7 X 0.75	8.7	100.0	136
FD 1100058	8 X 0.75	9.6	109.0	155
FD 1100510	10 X 0.75	10.7	130.0	186
FD 1100512	12 X 0.75	11.2	154.0	214
FD 1100514	14 X 0.75	11.9	171.0	243
FD 1100515	15 X 0.75	12.5	179.0	261
FD 1100516	16 X 0.75	12.5	189.0	271
FD 1100518	18 X 0.75	13.3	195.0	307
FD 1100520	20 X 0.75	14.0	116.0	331
FD 1100521	21 X 0.75	14.0	225.0	341
FD 1100525	25 X 0.75	15.5	280.0	405
FD 1100528	28 X 0.75	16.7	298.0	460
FD 1100530	30 X 0.75	16.8	312.0	481
FD 1100062	2 X 1.0	7.0	43.0	75
FD 1100063	3 X 1.0	7.4	56.0	92
FD 1100064	4 X 1.0	8.0	68.0	110
FD 1100065	5 X 1.0	8.8	79.0	137
FD 1100066	6 X 1.0	9.5	92.0	159
FD 1100067	7 X 1.0	9.5	106.0	167
FD 1100068	8 X 1.0	10.7	118.0	195
FD 1100610	10 X 1.0	12.0	140.0	234
FD 1100612	12 X 1.0	12.3	168.0	263
FD 1100614	14 X 1.0	13.1	192.0	302
FD 1100615	15 X 1.0	13.7	208.0	321
FD 1100616	16 X 1.0	13.8	221.0	334
FD 1100618	18 X 1.0	14.5	252.0	375
FD 1100620	20 X 1.0	15.2	279.0	406
FD 1100621	21 X 1.0	15.2	293.0	419
FD 1100625	25 X 1.0	17.1	335.0	504
FD 1100628	28 X 1.0	18.5	374.0	571
FD 1100630	30 X 1.0	18.6	401.0	599
FD 1100072	2 X 1.5	8.0	58.0	96
FD 1100073	3 X 1.5	8.4	74.0	118
FD 1100074	4 X 1.5	9.1	108.0	143
FD 1100075	5 X 1.5	9.8	129.0	173
FD 1100076	6 X 1.5	10.8	142.0	208
FD 1100077	7 X 1.5	10.8	154.0	218
FD 1100078	8 X 1.5	12.0	164.0	248
FD 1100710	10 X 1.5	13.4	188.0	300
FD 1100712	12 X 1.5	13.9	254.0	347
FD 1100714	14 X 1.5	14.7	292.0	392
FD 1100715	15 X 1.5	15.5	311.0	418
FD 1100716	16 X 1.5	15.5	331.0	436
FD 1100718	18 X 1.5	16.7	350.0	506
FD 1100720	20 X 1.5	17.5	368.0	546
FD 1100721	21 X 1.5	17.5	388.0	565
FD 1100725	25 X 1.5	20.1	463.0	698
FD 1100728	28 X 1.5	21.2	517.0	768
FD 1100730	30 X 1.5	21.3	550.0	806

* Please specify the desired packaging size (e.g. 100 m coils)

* other sizes can be manufactured on demand

Data cables low frequency

DICABS FD DISTRONIC - LiYCY (TP) RoHS

FD DISTRONIC - LiYCY (TP)

Technical data

Core identification code
DIN 47100 excepting for extruded secondary colour line in place of ring printing

Peak working voltage
250 V (not for power applications)

Coupling
(1 kHz) approx. 300 pf at 100 m

Minimum bending radius
Flexing: 15 x cable diameter
fixed, insulation: 6 x cable diameter

Mutual capacitance
0.14 mm²
C / C approx. 140 nF / km
C / S approx. 110 nF / km
> 0.25 mm²
C / C approx. 150 nF / km
C / S approx. 230 nF / km

Based on
VDE 0814 (DIN) 47414) or VDE 0812

Inductivity
Approx. 0.65 mH / km

Test voltage
at 0.14 sqmm: 1200 V
> 0.14 sqmm: 1500 V

Specific insulation resistance
> 20 GOhm x cm

Conductor
Fine copper wire stranding

Range of temperature
fixed installation: -15 ° C to + 80 ° C
flexing: -5 ° C to + 70 ° C

Benefits

* Data transmission with good screening, twisted pairs (TP) decouples the Cable circuits.

Product make-up

* Bare copper wire bunched conductor
* PVC core insulation
* Cores twisted in pairs with optimal lay-length
* Screen braiding made from tinned copper wire
* Outer sheath : Special PVC grey

Approvals (Norm references)

* Using **RoHS** compliance compounds

Application range

* Good protection against the capacitive influence due to electric field (e.g. power cable)
* Dry and damp indoors
* LiYCY (TP) is well suited for use in areas subjected to signal interference

Product features

* Excellent screening against electrical Interference
* The twisted pairs are covered with an impervious copper braid
* The twisted pairs conformed favourable cross-talk attenuation values
* Flame-retardant acc. to IEC 60332-1-2

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg /km	Weight kg /km (approx.)
FD DISTRONIC - LiYCY (TP); Uo / U: 300 / 500 V				
FD 300121	1 X 2 X 0.14	4.5	13.9	31
FD 300122	2 X 2 X 0.14	5.4	20.1	43
FD 300123	3 X 2 X 0.14	6.2	26.0	55
FD 300124	4 X 2 X 0.14	6.8	31.6	65
FD 300126	6 X 2 X 0.14	7.8	41.7	84
FD 300128	8 X 2 X 0.14	8.7	51.4	102
FD 301210	10 X 2 X 0.14	9.5	59.8	123
FD 301212	12 X 2 X 0.14	10.2	67.3	138
FD 301216	16 X 2 X 0.14	11.4	86.4	172
FD 301220	20 X 2 X 0.14	12.4	101.3	202
FD 301225	25 X 2 X 0.14	13.6	117.6	235
FD 300221	1 X 2 X 0.25	4.8	16.3	35
FD 300222	2 X 2 X 0.25	6.3	26.8	59
FD 300223	3 X 2 X 0.25	7.1	34.9	74
FD 300224	4 X 2 X 0.25	7.8	43.1	89
FD 300226	6 X 2 X 0.25	9.0	56.6	114
FD 300228	8 X 2 X 0.25	10.4	72.1	151
FD 302210	10 X 2 X 0.25	11.3	84.7	174
FD 302212	12 X 2 X 0.25	12.1	96.4	197
FD 302216	16 X 2 X 0.25	13.5	122.6	243
FD 302225	25 X 2 X 0.25	16.1	176.7	339
FD 300421	1X 2 X 0.50	6.0	27.0	53
FD 300422	2X 2 X 0.50	7.7	48.1	84
FD 300423	3X 2 X 0.50	8.8	73.7	109
FD 300424	4X 2 X 0.50	9.7	82.0	133
FD 300426	6X 2 X 0.50	11.3	110.0	176
FD 300428	8X 2 X 0.50	13.1	139.0	231
FD 304212	12X 2 X 0.50	15.5	198.3	314
FD 304216	16X 2 X 0.50	17.5	240.0	387
FD 300521	1X 2 X 0.75	6.6	35.0	65
FD 300522	2X 2 X 0.75	8.5	58.0	107
FD 300523	3X 2 X 0.75	9.9	84.0	140
FD 300524	4X 2 X 0.75	11.0	108.0	172
FD 300525	5X 2 X 0.75	12.0	128.0	203
FD 300526	6X 2 X 0.75	13.3	146.0	242
FD 300528	8X 2 X 0.75	14.9	180.0	301
FD 305212	12X 2 X 0.75	17.6	261.0	410
FD 300621	1X 2 X 1.0	7.4	68.0	79
FD 300622	2X 2 X 1.0	9.3	84.0	124
FD 300623	3X 2 X 1.0	10.8	96.0	166
FD 300624	4X 2 X 1.0	12.5	121.0	217
FD 300625	5X 2 X 1.0	13.6	161.0	254

* Please specify the desired packaging size (e.g. 100 m coils)
* other sizes can be manufactured on demand

Data cables low frequency

DICABS FD DISTRONIC - Li2YCY (TP) **RoHS**

FD DISTRONIC - Li2YCY (TP)

Technical data

Core identification code
DIN 47100 excepting for extruded secondary colour line in place of ring printing.

Mutual capacitance
Li2YCY (TP) At 800 Hz: max. 60 nF / km (valid starting at 4 pair)

Peak working voltage
Li2YCY (TP) 250 V (not for power applications)

Based on
Li2YCY (TP) VDE 0812

Specific insulation resistance
> 5 GOhm x km

Minimum bending radius
fixed, insulation: 7.5 x cable diameter

Range of temperature
fixed installation: -15 ° C to + 70 ° C

Inductivity
Li2YCY (TP) Approx. 0.65 mH / km

Conductor
Li2YCY (TP) Stranded copper conductor, Based on VDE 0881, 7 wire

Test voltage
Li2YCY (TP)
C / C : 2000 V
C / S : 1000 V

Loop resistance
Li2YCY (TP)
0.22 sqmm max. 186 Ohm / km
0.34 sqmm max. 115 Ohm / km
0.50 sqmm max. 78.4 Ohm / km

Characteristic impedance
100 Ohm + - 15

Cable attenuation / attenuation
Li2YCY (TP)
(recommended values): 0.22 sqmm.
100 kHz 9.0 dB / km
1 MHz 25.0 dB / km
(recommended values): 0.34 sqmm.
100 kHz 6.6 dB / km
1 MHz 20.0 dB / km
(recommended values): 0.50 sqmm.
100 kHz 6.0 dB / km
1 MHz 18.0 dB / km

Short-range crosstalk attenuation
UP to 1 MHz min. 50 dB
UP to 10 MHz min. 40 dB

Application range

* Li2YCY (TP) is particularly suitable for wiring from data systems at transmission rates up to 10 Megabit per second.
* Cables of this kind are designed for fixed installation in dry and damp interiors and for conditional flexible use.

Approvals (Norm references)

* Using **RoHS** complaínces compounds

Product features

* Flame-retardant acc. to IEC 60332-1-2

Product make-up

* **Li2YCY (TP)**
* Stranded conductor, 7-wire, bare
* PE core insulation
* Screen braiding made from copper wire
* PVC outer sheath
* Colour: Grey

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg./km	Weight kg./km (approx)
FD DISTRONIC - Li2YCY - (TP); Uo / U: 300 / 500 V				
FD 100021	1 X 2 X 0.22	5.3	18.2	38
FD 100022	2 X 2 X 0.22	6.6	26.4	54
FD 100023	3 X 2 X 0.22	7.3	34.2	67
FD 100024	4 X 2 X 0.22	8.1	43.0	82
FD 100028	8 X 2 X 0.22	10.6	70.2	133
FD 100210	10 X 2 X 0.22	11.5	81.1	152
FD 100321	1 X 2 X 0.34	5.8	20.6	45
FD 100322	2 X 2 X 0.34	7.3	34.2	68
FD 100323	3X 2 X 0.34	8.1	44.5	85
FD 100324	4 X 2 X 0.34	9.1	54.0	106
FD 100328	8 X 2 X 0.34	11.7	90.4	166
FD 103210	10 X 2 X 0.34	13.2	107.9	207
FD 100421	1 X 2 X 0.50	6.8	27.2	59
FD 100422	2 X 2 X 0.50	8.7	44.4	89
FD 100423	3 X 2 X 0.50	10.0	60.7	120
FD 100424	4 X 2 X 0.50	11.1	74.8	145
FD 100425	5 X 2 X 0.50	12.0	90.1	170
FD 100428	8 X 2 X 0.50	14.8	129.3	250
FD 104210	10 X 2 X 0.50	16.2	153.0	292

* Please specify the desired packaging size (e.g. 100 m coils)
* other sizes can be manufactured on demand

Data cables low frequency

DICABS FD DISTRONIC - Li2YCY PiMF **RoHS**

FD DISTRONIC - Li2YCY PiMF

Pair in Metal Foil

Technical data

Core identification code
DIN 47100 excepting for extruded secondary colour line in place of ring printing.

Mutual capacitance
At 800 Hz: 0.22 sqmm max. 70 nF / km
0.34 sqmm max. 70 nF / km
0.50 sqmm max. 75 nF / km
1.0 sqmm max. 85 nF / km

Peak working voltage
250 V (not for power applications)

Insulation resistance
> 5 GOhm x km

Inductivity
Approx. 0.4 mH / km

Minimum bending radius
fixed, insulation: 10 x cable diameter

Test voltage
C / C : 2000 V
C / S : 1000 V

Range of temperature
fixed installation: -30 ° C to + 70 ° C

Characteristic impedance
0.22 sqmm approx. 80 Ohm
0.34 sqmm approx. 85 Ohm
0.50 sqmm approx. 80 Ohm
1.0 sqmm approx. 75 Ohm

Loop resistance
0.22 sqmm max. 186 Ohm / km
0.34 sqmm max. 115 Ohm / km
0.50 sqmm max. 78.4 Ohm / km
1.0 sqmm max. 39.0 Ohm / km

Conductor
7 or fine wired strand based on VDE 0881.

Cable attenuation / attenuation
(Guideline values): 0.22 sqmm.
100 kHz 11.5 dB / km
1 MHz 46.0 dB / km
(Guideline values): 0.34 sqmm.
100 kHz 9.0 dB / km
1 MHz 38.0 dB / km
(Guideline values): 0.50 sqmm.
100 kHz 7.0 dB / km
1 MHz 35.0 dB / km
(Guideline values): 1.0 sqmm.
100 kHz 5.0 dB / km
1 MHz 20.0 dB / km

Short-range crosstalk attenuation
UP to 1 MHz min. 75 dB

Benefits

* Data cable with low capacitance, pair screening and overall copper braiding.

Product features

* Flame-retardant acc. to IEC 60332-1-2

Approvals (Norm references)

* Using **RoHS** complaincs compounds

Application range

* DISTRONIC Li2YCY PiMF with individual screening of the pairs is particularly suitable for wiring data systems and controls in large industrial plants, for the transmission of sensitive signals and high bit rates for enhanced requirements in near-end cross-talk attenuation and high electrical interference in the circuits.
* For measurement value transmission and serial 2 wire interfaces.
* Cables of this type are intended for limited flexible use, and for fixed installation in dry and damp interiors.

Product make-up

* Stranded 7- wire bare copper conductor
* PE core insulation
* Foil wrapping, static screening of aluminum laminated plastic film with drain wire
* PVC outer sheath
* Colour : grey

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg./km	Weight kg./km (approx.)
DISTRONIC - FD Li2YCY (PiMF) ; Uo / U: 300 / 500 V				
FD 200021	1 X 2 X 0.22	5.5	21.2	46
FD 200022	2 X 2 X 0.22	6.8	32.2	68
FD 200023	3 X 2 X 0.22	7.7	43.1	89
FD 200024	4 X 2 X 0.22	8.5	55.2	111
FD 200028	8 X 2 X 0.22	11.1	94.8	196
FD 200210	10 X 2 X 0.22	12.0	111.6	234
FD 200321	1 X 2 X 0.34	5.8	23.6	51
FD 200322	2 X 2 X 0.34	7.3	40.2	80
FD 200323	3 X 2 X 0.34	8.3	53.7	105
FD 200324	4 X 2 X 0.34	9.3	66.2	133
FD 200328	8 X 2 X 0.34	12.4	115.1	240
FD 203210	10 X 2 X 0.34	13.5	138.7	288
FD 200421	1 X 2 X 0.50	6.8	30.2	65
FD 200422	2 X 2 X 0.50	8.7	50.4	103
FD 200423	3 X 2 X 0.50	10.2	70.0	144
FD 200424	4 X 2 X 0.50	11.3	87.2	177
FD 200425	5 X 2 X 0.50	12.3	105.5	212
FD 200528	8 X 2 X 0.50	15.2	154.2	324
FD 205210	10 X 2 X 0.50	16.6	184.0	389
FD 200621	1 X 2 X 1.0	7.5	42.3	85
FD 200622	2 X 2 X 1.0	9.7	73.5	139
FD 200623	3 X 2 X 1.0	11.7	101.8	199
FD 200624	4 X 2 X 1.0	13.1	127.7	246
FD 206210	10 X 2 X 1.0	19.3	278.2	542

* Please specify the desired packaging size (e.g. 100 m coils)
* other sizes can be manufactured on demand

Cables for Profibus - DP/FIP

DICABS FD DISTRONIC - BUS L2/FIP **RoHS**

FD DISTRONIC - BUS L2/FIP

Technical data

Mutual capacitance
(800 Hz): max. 30nF/km

Test voltage
Core / core: 1500V

Conductor resistance
(loop): max. 110 Ohm/km

Peak working voltage
250 V (not for power applications)

Characteristic impedance
150 +/- 15 Ohm

Product features

* These bus cables can be used for PROFIBUS-FD as well as for PROFIBUS - FMS and FIP
* Flame-retardant acc. to IEC 60332-1-2

Product make-up

* Different versions with “conventional” or with “Fast Connect” (FC) cable design.
* PE: for the food and beverage industry
* Solid copper wire
* Special flame retardant sheath

Application range

* For stationary installation of Bus Systems 100-120 Ohm impedance
* Dry and damp indoors
* For the information exchange between different automation system a well as for communication with the connected decentralized field units, serial field bus systems are used.

Approvals (Norm references)

* Using **RoHS** compliance compounds

Part Number	Article designation	Number of pairs and conductor diameter in mm	Outer diameter in mm (approx.)	Copper index Kg./Km	Weight kg./km (approx.)
For fixed installation - conventional cable assembly					
FD 9001321	BUS- L2 / FIP	1 X 2 X 0.64	8.0	30.1	57
For fixed installation - “Fast connect” cable assembly					
FD 9011321	BUS- L2 / FIP FC	1 X 2 X 0.64	8.0	26.0	76

* Please specify the desired packaging size (e.g. 1 x 500 m drum or 5 x 100 m coils)

* other sizes can be manufactured on demand

Triad cable

DICABS FD DISTRONIC - TRIAD **RoHS**

FD DISTRONIC - TRAID

Technical data

Core identification code
Blue , Black & Brown, with colour repetition & no.Print

Inductivity
Approx. 0.65 mH / km

Range of temperature
fixed installation: -15 ° C to + 70 ° C
fixing: -5 ° C to + 70 ° C

Mutual capacitance
Approx. C to C 200 nF / km
C to S 400 nF / Km

Minimum bending radius
fixed, insulation: 15 x cable diameter

Based on
BS 5308

Specific insulation resistance
> 20 G Ohm x cm

Test voltage
at1.0 sqmm: 2000 V

Benefits

* Highly resistant against acids, lyes and certain oils at room temperature.

Product features

* Good EMC Characteristic
* Flexibility
* Flame-retardant acc. to IEC 60332-1-2

Product Make-up

* Bare copper wire Flexible conductor
* PVC core insulation and outer sheath
* Overall screening with AL-Mylar Tape with drain wire
* Colour: Grey

Approvals (Norm references)

* Using **RoHS** complaincies compounds

Part Number	Number of cores and mm² per conductor	Outer diameter in mm (approx.)	Copper index Kg./km	Weight kg./km (approx.)
FD 1200631	1 X 3 X 1.0	9.0	33.0	112
FD 1200634	4 X 3 X 1.0	16.5	118.0	340
FD 1200636	6 X 3 X 1.0	20.2	174.5	475
FD 1200638	8 X 3 X 1.0	22.8	231.5	605
FD 1200731	1 X 3 X 1.5	9.5	47.6	136
FD 1200734	4 X 3 X 1.5	18.1	175.8	438
FD 1200736	6 X 3 X 1.5	22.2	262.5	614
FD 1200738	8 X 3 X 1.5	25.3	350.5	775

* Please specify the desired packaging size (e.g. 1 x 500 m drum or 5 x 100 m coils)
* other sizes can be manufactured on demand

- We can also supply individual, overall screen with al-mylar tape & overall copper braiding / armouring on request.
- We can also supply Pair cable with individual, overall screen through al-mylar on request.
- We can also supply flexible / conventional armoured cable.

TABLE 1: Conductor Resistances and Conductor Make-up

Technical Table

Conductor Resistances

Conductor resistance for copper conductor (extract from VDE 0295 and in accordance with international rules, e.g. IEC 60228).

Nominal Cross-sectional in mm²	Maximum Conductor Resistance at 20ºC (Ohm/Km)			
	of Metal Coated Copper Wire		of Bare Copper Wire	
	Class 1 + 2	Class 5 + 6	Class 1 + 2	Class 5 + 6
0.14		142.0		138.0
0.25		82.0		79.0
0.34		59.0		57.0
0.5	36.7	40.1	36.0	39.0
0.75	24.8	26.7	24.5	26.0
1.0	18.2	20.0	18.1	19.5
1.5	12.2	13.7	12.1	13.3
2.5	7.56	8.21	7.41	7.98
4.0	4.70	5.09	4.61	4.95
6.0	3.11	3.39	3.08	3.30
10	1.84	1.95	1.83	1.91
16	1.16	1.24	1.15	1.21
25	0.734	0.795	0.727	0.780
35	0.529	0.565	0.524	0.554
50	0.391	0.393	0.387	0.386

Conductor make-up: Accordance with IEC 60228, VDE0295, IS:8130/84

Conductor make-up is specified by the maximum single wire diameter and the maximum conductor resistance.

Nominal Cross-sectional in mm²	Approximate no. of wire / Nominal wire diameter No. / mm		Approximate no. of wire / Nominal wire diameter No. / mm	
	Multi- Strands Conductors Class 2	Multi- Wires Conductors Class 2	Fine- Wire Conductors Class 5	Fine- Wire Conductors Class 6
0.14				18 X 0.10
0.25			14 X 0.15	32 X 0.10
0.34		7 X 0.25	19 X 0.15	42 X 0.10
0.5	7 X 0.30	7 X 0.30	16 X 0.20	28 X 0.15
0.75	7 X 0.37	7 X 0.37	24 X 0.20	42 X 0.15
1.0	7 X 0.43	19 X 0.26	32 X 0.20	56 X 0.15
1.5	7 X 0.52	19 X 0.32	37 X 0.230	84 X 0.15
2.5	7 X 0.67	37 X 0.29	61 X 0.230	140 X 0.15
4.0	7 X 0.85	61 X 0.29	61 X 0.288	224 X 0.15
6.0	7 X 1.05	91 X 0.29	91 X 0.288	192 X 0.20
10	7 X 1.35	91 X 0.37	91 X 0.376	320 X 0.20
16	7 X 1.70	145 X 0.37	144 X 0.376	512 X 0.20
25	7 X 2.13	183 X 0.42	196 X 0.40	800 X 0.20
35	7 X 2.52	183 X 0.50	276 X 0.40	1120 X 0.20
50	7 X 1.83	183 X 0.60	396 X 0.40	705 X 0.30

TABLE 2-1: Power Rating

Technical Table

Power rating of wire and cables at ambient temperature up to 30 ° C

Nominal Cross-sectional in mm²	0.25	0.50	0.75	1.0	1.5	2.5	4.0	6.0	10	16	25	35	50
Power Rating in. Amp	4.5	9	12	15	18	26	34	44	61	82	108	135	168

TABLE 2-2 : Correction Factors

For ambient temperature different to 30º C

	Rated Temperature of the conductor of wire and cable				
	60 ° C	70 ° C	80 ° C	85 ° C	90 ° C
Ambient Temperature in ° C	Correction factor, applicable to current value of table 2-1				
10	1.29	1.22	1.18	1.17	1.15
15	1.22	1.17	1.14	1.13	1.12
20	1.15	1.12	1.10	1.09	1.08
25	1.08	1.06	1.05	1.04	1.04
30	1.00	1.00	1.00	1.00	1.00
35	0.94	0.94	0.95	0.95	0.96
40	0.84	0.84	0.87	0.90	0.91
45	0.79	0.79	0.84	0.85	0.87
50	0.71	0.71	0.77	-	0.82
55	0.61	0.61	0.71	-	0.76
60	0.50	0.50	0.63	-	0.71
65	0.35	0.35	0.55	-	0.65
70	-	-	0.45	-	0.58
75	-	-	0.32		0.50
80	-	-	-	-	0.41
85	-	-	-	-	0.29

TABLE 2-3 : Correction Factors

For multi-conductor cables and cords, having conductor size up to 10 mm²

Rated Temperature of the Conductor of Wire and Cable		
No. of current carrying Conductors	Correction factors for cables in free air	Correction factors for cables in earth (burial)
5	0.75	0.70
7	0.65	0.60
10	0.55	0.50
14	0.50	0.45
19	0.45	0.40
24	0.40	0.35
40	0.35	0.30
61	0.30	0.25

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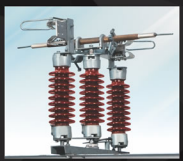

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